

In the Claims:

This listing of claims replaces all prior versions.

1. (Previously presented) An arrangement for providing telephonic communication which may be selectively transmitted via the Internet using standard Internet protocols, comprising:

a telephone; and

an interface unit coupled to the telephone and configured and arranged to receive audio information designating a telephonic communication addressee from the telephone, the interface unit including

a first output port configured to be coupled to a standard switched telephone communications network,

a second output port configured to be coupled to an Internet communications network, and

a processing unit configured and arranged to analyze the audio information as a function of Internet protocol connectivity status of the telephonic communication addressee and, in response to the analysis, to determine whether the audio information received from the telephone is to be coupled to the first output port to establish a standard telephonic communication using the standard switched telephone communications network, or if the audio information is to be processed in accordance with the standard Internet transfer protocols and coupled to the second output port to establish an Internet communication using the Internet communications network to communicate the processed audio information in accordance with the standard Internet transfer protocols.

2. (Original) An arrangement as recited in claim 1, wherein the standard Internet transfer protocols include a standard gatekeeper protocol for handling gatekeeper signaling, a standard Internet call protocol for handling Internet call signaling and a standard end-to-end protocol for handling end-to-end control.

3. (Original) An arrangement as recited in claim 2, wherein the standard gatekeeper protocol uses an RAS standard protocol, the standard Internet call protocol uses a Q.931 standard protocol and the standard end-to-end protocol uses an H.245 standard control protocol.
4. (Original) An arrangement as recited in claim 1, wherein the standard Internet transfer protocols include a standard packetization protocol to packetize a stream of audio information.
5. (Original) An arrangement as recited in claim 4, wherein the standard packetization protocol uses a standard real-time transfer protocol (RTP).
6. (Original) An arrangement as recited in claim 3, wherein the standard Internet transfer protocols include a standard real-time transfer protocol (RTP) to packetize a stream of audio information.
7. (Original) An arrangement as recited in claim 4, wherein the standard Internet transfer protocols include a standard quality-of-service protocol for gathering quality-of-service statistics of packetized information delivered to a receiving device.
8. (Original) An arrangement as recited in claim 5, wherein the standard Internet transfer protocols include a standard quality-of-service protocol for gathering quality-of-service statistics regarding packetized information communicated over the Internet.
9. (Original) An arrangement as recited in claim 8, wherein the standard quality-of-service protocol uses standard real-time transfer control protocol (RTCP).
10. (Original) An arrangement as recited in claim 7, further comprising a monitoring unit provided to monitor the quality-of-service statistics and to adaptively control a rate at which audio information is transferred over the Internet.

11. (Original) An arrangement as recited in claim 9, further comprising a monitoring unit provided to monitor the RTCP information and to adaptively control a rate at which audio information is transferred over the Internet.

12. (Previously presented) A method of providing telephonic communication using an Internet communications channel, the method comprising the steps of:

providing a first communications device, coupled to a standard switched telephone network for normal telephonic communication and to an Internet connection coupled to the Internet, the first communications device including an interface device provided to selectively couple an output of the first communications device to one of the standard switched telephone network and the Internet connection, the interface device being adapted to automatically determine, in response to data information designating a communication addressee and as a function of Internet protocol connectivity status of the communication addressee, whether the output is to be selectively coupled to at least one of: the standard switched telephone network and the Internet connection;

providing a second communication device coupled to the Internet;

initiating a call using the first communication device to the second communication device using by establishing an initial Q.931 protocol;

establishing far end control of the second communication device by the first communication device in accordance with an H.245 protocol;

performing gatekeeper signaling in the first communication device accordance with an RAS protocol; and

packetizing audio information of the telephonic communication for transfer over the Internet using a standard real-time transfer protocol (RTP).

13-15. (Previously canceled)

16. (Previously presented) An arrangement for providing telephonic communication that may be selectively transmitted via the Internet using standard Internet protocols, comprising:

a telephone; and

interface means coupled to the telephone and configured and arranged to receive audio information designating a telephonic communication addressee, the interface means comprising:

first output means configured to be coupled to a standard switched telephone communications network,

second output means configured to be coupled to an Internet communications network, and

processing means configured and arranged to determine, as a function of Internet protocol connectivity status of the telephonic communication addressee, whether the audio information received from the telephone is to be coupled to the first output means to establish a standard telephonic communication using the standard switched telephone communications network, or to be processed in accordance with the standard Internet transfer protocols and coupled to the second output means to establish an Internet communication using the Internet communications network to communicate the processed audio information in accordance with the standard Internet transfer protocols.

17. (Previously presented) A method for providing telephonic communication that may be selectively transmitted via the Internet using standard Internet protocols, the method comprising:

providing an interface unit having a memory and adapted to receive telephonic communication in response to user intervention and to communicate the telephonic communication via at least one of: a first output coupled to a standard switched telephone network and a second output coupled to an Internet communications network;

providing a telephone device communicatively coupled to the interface unit;

generating audio information, that designates a communication addressee, at the telephone and sending the information to the interface unit;

analyzing the audio information and therein automatically determining, at the interface unit, whether the audio information received from the telephone is to be coupled to the first or second output as a function of Internet protocol connectivity of the designated communication addressee; and

responsive to the determination, coupling the telephone via the interface unit to at least one of the standard switched telephone network and the Internet communications network.

18. (Previously presented) The method of claim 17, wherein automatically determining whether the audio information is to be coupled to the first or second output is responsive to comparing a DTMF code received as part of the audio information to a variable stored in memory at the interface and is without further user intervention.

19. (Previously presented) The method of claim 17, wherein automatically determining whether the audio information is to be coupled to the first or second output is responsive to detecting a DTMF code received as part of the audio information that represents the number for a local Internet access provider and is without further user intervention.

20. (Previously presented) The method of claim 17, wherein automatically determining whether the audio information is to be coupled to the first or second output is responsive to comparing a DTMF code received as part of the audio information to a telephone number stored in memory at the interface and is without further user intervention.

21. (Previously presented) The arrangement of claim 1, wherein the interface unit further comprises a memory, and wherein the processing unit is adapted to automatically determine whether the audio information is to be coupled to the first or second output by comparing a DTMF code received as part of the audio information to a variable stored in memory at the interface, without further audio information.

22. (Previously presented) The arrangement of claim 1, wherein the processing unit is adapted to automatically determine whether the audio information is to be coupled to the first or second output by detecting if a DTMF code received as part of the audio information represents the number for a local Internet access provider, without further audio information.

23. (Previously presented) The arrangement of claim 1, wherein the interface unit further comprises a memory, and wherein the processing unit is adapted to automatically determine whether the audio information is to be coupled to the first or second output by comparing a DTMF code received as part of the audio information to a telephone number stored in memory at the interface, without further audio information.

24. (Previously presented) An interface unit for providing telephonic communication, the interface unit including:

- a first output port configured to be coupled to a standard switched telephone communications network,

- a second output port configured to be coupled to an Internet communications network, and

- a processing unit configured and arranged to receive audio information including information that designates a telephonic communication address, to analyze the telephonic communication address as a function of Internet protocol connectivity status of the telephonic communication address and, in response to the analysis, to determine whether the audio information is to be coupled to the first output port to establish a standard telephonic communication using the standard switched telephone communications network, or if the audio information is to be processed in accordance with the standard Internet transfer protocols and coupled to the second output port to establish an Internet communication using the Internet communications network to communicate the processed audio information in accordance with the standard Internet transfer protocols.

25. (Previously presented) A processing unit configured and arranged to receive audio information including information that designates a telephonic communication address, to analyze the telephonic communication address as a function of active Internet protocol connectivity status of the telephonic communication address and, in response to the analysis, to determine whether the audio information is to be transmitted via a standard switched telephone communications network or if the audio information is to be transmitted via an Internet communications network.

26. (Previously presented) The arrangement of claim 1, wherein the processing unit is further configured and arranged to analyze a portion of the audio information that designates the telephonic communication addressee as a function of Internet protocol connectivity status of the telephonic communication addressee by searching for an active Internet protocol address for the telephonic communication addressee.

27. (Previously presented) The arrangement of claim 26, wherein the processing unit is configured and arranged to, in response to the addressee not having an active Internet protocol address, couple the audio information to the first output port to establish a standard telephonic communication using the standard switched telephone communications network, and, in response to the addressee having an active Internet protocol address, couple the audio information to the second output port to establish an Internet communication using the Internet communications network to communicate the processed audio information in accordance with the standard Internet transfer protocols.

28. (Previously presented) The arrangement of claim 1, wherein the processing unit is configured and arranged to associate the audio information with an Internet protocol address and to analyze the audio information as a function of Internet protocol connectivity status of the telephonic communication addressee by using the Internet protocol address to determine whether the addressee is currently connected to the Internet.

29. (Previously presented) The method of claim 12, wherein initiating a call using the first communication device to the second communication device using by establishing an initial Q.931 protocol includes:

searching for an active Internet protocol address for the communication addressee; and

in response to finding an active Internet protocol address for the communication addressee, establishing the initial Q.931 protocol.

30. (Previously presented) The arrangement of claim 24, wherein the processing unit is further configured and arranged to analyze a portion of the audio information that designates the telephonic communication addressee as a function of Internet protocol connectivity status of the telephonic communication addressee by searching the Internet for an active Internet protocol address for the telephonic communication addressee.

31. (Previously presented) An interface unit for providing telephonic communication between a calling party and another party, the interface unit comprising:

- a first output port configured to be coupled to a standard switched telephone communications network;

- a second output port configured to be coupled to an internet communications network; and

- a processing unit configured and arranged to:

- receive from the calling party a telephone number designating a telephonic communications addressee;

- communicate with an internet appliance to determine whether the telephonic communications addressee is accessible via internet protocol telephonic communications as a function of internet connectivity status of the telephonic communications addressee;

- in response to determining that the telephonic communications addressee is not accessible via internet protocol telephonic communications, telephonically connect audio information from the calling party to the other party via the first output port to establish standard telephonic communications between the calling party and the other party using the standard switched telephone communications network; and

- in response to determining that the telephone number is accessible via internet protocol telephonic communications, telephonically connect audio information from the calling party to the other party via the second output port to establish internet telephonic communications between the calling party and the other party using the internet communications network.

32. (Previously presented) The interface unit of claim 31, wherein the processing unit is configured and arranged to communicate with an internet appliance to determine whether the telephonic communications addressee is accessible via internet protocol telephonic communications as a function of internet connectivity status of the telephonic communications addressee by determining whether an internet protocol telephone call made to the communications addressee is connected.

33. (Previously presented) The interface unit of claim 31, wherein the processing unit is configured and arranged to connect audio information from the calling party to the other party via the first output port to establish standard telephonic communications between the calling party and the other party using the standard switched telephone communications network in response to an internet connection previously available to the interface unit being disabled.

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)